

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>Applicants:</b>	Kazuhiko Inoue, et al.	<b>Examiner:</b>	Gregory Listvoyb
<b>Serial No.:</b>	10/518,859	<b>Art Unit:</b>	1796
<b>Filed:</b>	December 17, 2004	<b>Docket:</b>	18493
<b>For</b>	BIODEGRADABLE RESIN, BIODEGRADABLE RESIN COMPOSITION, BIODEGRADABLE MOLDED OBJECT, AND PROCESS FOR PRODUCING BIODEGREDEABLE RESIN		
<b>Confirmation No.:</b>	5819	<b>Dated:</b>	October 4, 2010

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REPLY BRIEF**

**I. INTRODUCTION**

This is in reply to the Examiner's Answer dated August 2, 2010 relative to the above-identified application. This Reply Brief addresses the issues specifically raised in the Examiner's Answer. The Reply Brief is meant to supplement the arguments raised in the Appellants' Brief.

Any argument not raised in the Reply Brief put presented in the Appellants' Brief is not to be considered withdrawn, but is incorporated by reference.

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Dated: October 4, 2010

/Paul J. Esatto, Jr./  
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Upon review of the Examiner's Answer, Appellants wish to address the following points advanced by the Examiner, which Appellants believe need clarification. Specifically, herein addressed are the rejections of Claims 43, 44, 51-54 and 131 under 35 U.S.C. §103(a) as being unpatentable over Chen et al. (U.S. Patent No. 6,018,033; hereinafter "Chen") in view of Ruben (U.S. Patent No. 6,146,655; hereinafter "Ruben") and further view of Helmus et al. (U.S. Publication No. 2004/0093080; hereinafter "Helmus") and Wiessler et al. (U.S. Patent No. 6,958,395; hereinafter "Wiessler").

## **II. REJECTIONS UNDER 35 U.S.C. §103**

The Examiner asserts that the Claims 43, 44, 51-54, and 131 are unpatentable in view of the combination of Chen, Ruben and Helmus.

On page 4 of the Examiner's Answer, the Examiner states that column 6 line 35 of Chen discloses a Diels-Alder reaction resulting in a thermo-reversible cross-linked structure which has a cleavage temperature over 120°C. Column 6, line 35 of Chen merely suggests the possible Diels-Alder reaction of the conjugated diene structure in the saccharide monomer, formula (IV), but does not teach or suggest the Diels-Alder type functional group with covalent bond having a cleavage temperature over 120°C.

Even though there is no description or disclosure of the cleavage temperature produced by Chen, the Examiner suggests this property is inherent. This statement is unsupported and in error.

The Federal Circuit requires more than a mere possibility that the disclosure of Chen would result in a resin with a temperature range of cleavage above 120°C. "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Continental Can Co. v. Monsanto*

Co., 948 F.2d 1264, 1269, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). In *Continental Can*, the Federal Circuit also stated that when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. No extrinsic evidence has been provided that can establish that the disclosure of Chen would result in a resin having a cleavage temperature over 120°C.

Hence the hypothetical combination of Chen, Ruben, Helmus and Wiessler does not teach or suggest each feature of independent Claim 43. Thus, Appellants submit that the rejection under 35 U.S.C. §103 is in error and must be reversed.

### III. CONCLUSIONS

It is clear that the claims recite subject matter that is not rendered obvious in view of the combination of Chen, Ruben and Helmus, or the combination of Chen, Ruben, Helmus and Wiessler. Appellants respectfully submit that the rejections of the claims for allegedly being unpatentable are in error.

In view of the remarks and arguments set forth in this Reply Brief, Appellant respectfully requests that the rejections under 35 U.S.C. § 103(a) citing the aforementioned references made in the Final Rejection dated August 18, 2009 be reversed by the Board of Patent Appeals and Interferences.

Respectfully submitted,

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**TRANSMITTAL LETTER  
(General - Patent Pending)**

Docket No.  
**18493**

In Re Application Of: **Kazuhiko Inoue, et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/518,859	December 17, 2004	Gregory Listvoyb	23389	1796	5819

Title: **BIODEGRADABLE RESIN, BIODEGRADABLE RESIN COMPOSITION, BIODEGRADABLE MOLDED OBJECT, AND PROCESS FOR PRODUCING BIODEGREDALE RESIN**

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

**REPLY BRIEF**

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*Signature*

Dated: **October 4, 2010**

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